IN THE DRAWINGS

The attached sheet of drawings includes changes to Figure 2. Please replace the original sheet for Figure 2 with the sheet provided. In Figure 2, the spelling of the name of the "Colo 201" cell line has been corrected form "Col 201".

Attachment: Replacement Sheet

Annotated Sheet Showing Changes

REMARKS

By virtue of this response, Claims 7-9 and 11-21 are currently pending in the application. Claims 1-6 and 10 have been withdrawn. Claims 7 and 8 have been cancelled. Claims 9, 11-15, 17 and 19-21 have been amended. These changes do not introduce new matter and entry of the amendment is respectfully requested.

Election/Restriction

Applicants confirm the provisional election of Group II and SEQ ID NO:1 (Claims 7-9 and 11-21), with traverse. Applicants submit that Claims 1-6 and 10 should be rejoined with Claims 7-9 and 11-21, given that the PRL-3 TRE sequence is the key feature of each group. The PRL-3 TRE derived from the 0.6kb sequence upstream of the translational start codon for the PRL-3 gene and presented herein as SEQ ID NO:1 is a subset of the 1 kb sequence upstream of the translational start codon for the PRL-3 gene, presented as SEQ ID NO:2.

Hence, it would not place an undo burden on the examiner to search and examine the full set of claims. Where a combination as claimed (i.e., Group II) sets forth the details of a subcombination as separately claimed (i.e., Group I), there is no evidence that combination is patentable without the details of the subcombination. In such cases, the inventions are not distinct and a requirement for restriction must not be made or maintained, even if the subcombination has separate utility. (see MPEP 806.05(c)).

Double Patenting Rejection

Claims 7, 11-19 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-41 of U.S. Patent No. 6,692,736.

Applicants respectfully submit that the present claims are not obvious in view of the claims of the cited applications. However, in order to further prosecution, filing of a terminal disclaimer will be considered upon indication of otherwise allowable subject matter.

Drawings

The drawings stand objected to under 37 CFR 1.83(a) because they fail to show results with the sell line "Colo 201" as described in the specification. The objection has been addressed herein by amendment of Figure 2 to refer to "Colo 201".

Claim Objections

Claims 8 and 20 stand objected to for the reasons set forth on page 8 of the Office Action. Claim 8 has been cancelled and Claim 20 amended herein to depend from Claim 9, rendering the objections moot.

Claim Rejections under 35 U.S.C.§101

Claim 21 stands rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. Claim 21 has been amended to recite an "isolated" host cell obviating the objection thereto.

Claim Rejections under 35 U.S.C.§112

Claims 7-9 and 11-21 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement.

The Office Action maintains that the PRL-3 gene is not metastatic colon cancer specific as defined in the specification. The Office Action further states that although the data provided d in the specification shows that the PRL-3 TRE region can promote expression in colon cancer cells lines, such as LoVo and SW620, when operably linked to a luciferase reporter gene and transiently transfected into LoVo and SW620 cells, the PRL-3 TRE region can promote gene expression in other cell types as well.

The examiner makes reference to Saha et al., 2001, as providing evidence that PRL-3 overexpression in human metastatic colon cancer biopsies is not necessarily the result of increased transcription. Applicants respectfully disagree.

Saha et al., 2001 (Science 294:1343) demonstrated that the PRL-3 gene has been found to be specifically expressed at high level in metastatic colon cancers. From about 144 up-regulated

genes specially in metastatic colon cancer library identified by the serial analysis of gene expression (SAGE), 38 genes were further verified by quantitative PCR. The PRL-3 gene was confirmed to be elevated in only the metastases but not the primary cancer or pre-malignant adenomas. PRL-3 was shown to be expressed at relatively high levels in each of 12 colorectal cancer metastases detected by Saha et al., 2001.

The first paragraph of 35 U.S.C. § 112 requires that the specification of a patent enable any person skilled in the art to which it pertains to make and use the claimed invention. Although the statute does not say so, enablement requires that the specification teach those in the art to make and use the invention without undue experimentation (e.g., In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir., 1991). An invention is enabled even though the disclosure may require some routine experimentation to practice the invention. Hybritech Inc, V. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1384, 231 U.S.P.Q. 81, 94 (Fed. Cir. 1986).

Without agreeing to the propriety of the rejection, in the interest of expediting prosecution of this case, Applicants have amended the claims herein to remove reference to the metastatic colon cancer specific activity of the PRL3 TRE.

In view of the above amendments and remarks, withdrawal of the enablement rejection under 35 U.S.C. § 112 is respectfully requested.

Claims 7-9 and 11-21 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement for the reasons set forth on pages 17-20. The rejections appear to be based on the definition of the term "metastatic colon cancer-specific transcriptional regulatory element" as being a TRE that preferentially directs expression in metastatic colon cancer cells. As set forth above, the data suggests that PRL-3 expression is elevated in only the metastases but not primary cancer cells or pre-malignant adenomas and hence is correlated with metastasis of colon cancer cells. However, in the interest of expediting prosecution of the instant case, Applicants have amended the claims herein to refer specifically to replication-competent adenovirus vectors comprising an adenovirus gene essential for replication under transcriptional control of a PRL-3 TRE.

The guidelines for determining compliance with 35 U.S.C. 112 note that the written description requirement for a claimed genus may be satisfied through sufficient description of a representative number of species by actual reduction to practice, reduction to drawings, or by disclosure of relevant identifying characteristics, *i.e.*, structure or other physical and/or chemical properties, by functional characteristics coupled with a known or disclosed correlation between function and structure, or by a combination of such identifying characteristics, sufficient to show the applicant was in possession of the claimed genus. Indeed, as set forth in the MPEP: a patent need not teach, and preferably omits, what is well known in the art. *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); *Hybritech. Inc. v. Monoclonal Antibodies, Inc .*, 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987); and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984).

Applicants submit that one of ordinary skill in the art would be informed by the teachings of the subject specification, as to how to make a replication-competent adenovirus vector comprising an adenovirus gene essential for replication under transcriptional control of a PRL-3 TRE. In view of the above amendments and remarks, withdrawal of the rejection is respectfully requested.

Claims 7-9 and 11-21 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7 and 8 have been cancelled and the dependency of Claims 11-21 has been amended. As such, the current claims do not recite the terms "specific" or "preferentially", obviating the rejection thereof.

Claim 19 has been amended to depend from Claim 18, such that there is antecedent basis for the term "where E1B has....".

Applicants respectfully submit that the grounds for the rejection have been obviated by the amendments submitted in this communication. Withdrawal of the rejections under 35 U.S.C. § 112, second paragraph is respectfully requested.

Claim Rejections under 35 U.S.C.§102

Claims 7. 11, and 17-19 stand rejected under 35 U.S.C. §102(b) as being anticipated by Hallenbeck et al. (U.S. Patent 5,998,205, IDS) for the reason set forth on page 22 of the Office Action. Applicants respectfully traverse the rejection.

For anticipation under 35 U.S.C. § 102, the reference "must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present." (MPEP §706.02). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Hallenbeck et al. does not disclose a replication-competent adenovirus vector comprising an adenovirus gene essential for replication under transcriptional control of a PRL-3 TRE.

Thus Hallenbeck et al. lacks explicit description of the structural features of the invention as required for anticipation under 35 U.S.C. § 102(e). Accordingly, the rejections should be withdrawn.

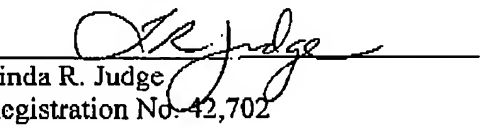
CONCLUSION

Applicants submit that the application is now in condition for examination on the merits. Early notification of such action is earnestly solicited. If any issues remain which the Examiner feels may be best resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact Applicants counsel, Linda R. Judge at (415) 836-2586.

Respectfully submitted,

DLA PIPER RUDNICK GRAY CARY US LLP

Dated: 7/24/06



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